

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A magnetic head assembly to record servo signals, that serves for positioning of data recording magnetic heads and data reproducing magnetic heads, on a magnetic tape comprising:

a servo signal recording head wherein a sliding surface of said servo signal recording head has a magnetic gap embedded thereon in order to record said servo signals onto the magnetic tape, and

a guide block which is set adjacent to a position of up-stream of a line of said magnetic tape passing said servo signal recording head and is slightly set back from said sliding surface of said servo signal recording head so that said magnetic tape slides on an edge of said servo signal recording head and on an outer edge of said guide block, the edge of said servo signal recording head and the outer edge of said guide block being chamfered,

wherein a wrap angle (θ_1) between said sliding surface of said recording head and a plane formed by the edge of said servo signal recording head and said outer edge of said guide block is in a range of 1.0 to 6.0 degrees.

2. (previously presented): A magnetic head assembly to record servo signals, that serves for positioning of data recording magnetic heads and data reproducing magnetic heads, on a magnetic tape comprising:

a servo signal recording head wherein a sliding surface of said servo signal recording head has a magnetic gap embedded thereon in order to record said servo signals onto the magnetic tape, and

a guide block which is set adjacent to a position of down-stream of a line of said magnetic tape passing said servo signal recording head and is slightly set back from said sliding surface of said servo signal recording head so that said magnetic tape slides on an edge of said servo signal recording head and on an outer edge of said guide block, the edge of said servo signal recording head and the outer edge of said guide block being chamfered,

wherein a wrap angle (θ_1) between said sliding surface of said recording head and a plane formed by the edge of said servo signal recording head and said outer edge of said guide block is in a range of 1.0 to 6.0 degrees.

3. (previously presented): A magnetic head assembly to record servo signals, that serves for positioning of data recording magnetic heads and data reproducing magnetic heads, on a magnetic tape comprising:

a servo signal recording head wherein a sliding surface of said servo signal recording head has a magnetic gap embedded thereon in order to record said servo signals onto the magnetic tape, and

two guide blocks of which one guide block is set adjacent to a position of up-stream of a line of said magnetic tape passing said servo signal recording head, the other guide block is set adjacent to a position of down-stream of a line of said magnetic tape passing said servo signal recording head and both guide blocks are slightly set back from said sliding surface of said servo signal recording head so that said magnetic tape slides on a downstream edge and an upstream edge of said servo signal recording head and on an outer edge of each said guide block, wherein

the downstream edge and the upstream edge of said servo signal recording head and the outer edge of each said guide block are chamfered,

wherein a wrap angle (θ_1) between said sliding surface of said recording head and a plane formed by at least one of the downstream edge and the upstream edge of said servo signal recording head and said outer edge of at least one of said guide blocks is in a range of 1.0 to 6.0 degrees.

4-6. (canceled).

7. (previously presented): A magnetic head assembly according to Claim 1, wherein said guide block has at least at a portion of said outer edge made of a material which has hardness of more than 1200 Vickers hardness.

8. (previously presented): A magnetic head assembly according to Claim 2, wherein said guide block has at least at a portion of said outer edge made of a material which has hardness of more than 1200 Vickers hardness.

9. (previously presented): A magnetic head assembly according to Claim 3, wherein each said guide block has at least at a portion of said outer edge made of a material which has hardness of more than 1200 Vickers hardness.

10. (previously presented): A magnetic head assembly according to Claim 1, wherein said guide block is made of a material of $\text{Al}_2\text{O}_3 \cdot \text{TiC}$.

11. (previously presented): A magnetic head assembly according to Claim 2, wherein said guide block is made of a material of $\text{Al}_2\text{O}_3 \cdot \text{TiC}$.

12. (previously presented): A magnetic head assembly according to Claim 3, wherein each said guide block is made of a material of $\text{Al}_2\text{O}_3 \cdot \text{TiC}$.

13. (original): A magnetic head assembly according to Claim 1, wherein said guide block is surface-finished for hardening.

14. (original): A magnetic head assembly according to Claim 2, wherein said guide block is surface-finished for hardening.

15. (previously presented): A magnetic head assembly according to Claim 3, wherein each said guide block is surface-finished for hardening.

16. (previously presented): A magnetic tape servo writer having a magnetic head assembly according to Claim 1,
wherein another wrap angle (θ_2) between a plane formed by the edge of said servo signal recording head and said outer edge of said guide block and a plane formed by the outer edge of said guide block and an edge of a tape guide which is adjacent to said guide block along a passing line of said magnetic tape is 0.5 to 2.0 degrees.

17. (previously presented): A magnetic tape servo writer having a magnetic head assembly according to Claim 2,

wherein another wrap angle (θ_2) between a plane formed by the edge of said servo signal recording head and said outer edge of said guide block and a plane formed by the outer edge of said guide block and an edge of a tape guide which is adjacent to said guide block along a passing line of said magnetic tape is 0.5 to 2.0 degrees.

18. (previously presented): A magnetic tape servo writer having a magnetic head assembly according to Claim 3,

wherein another wrap angle (θ_2) between a plane formed by at least one of the downstream edge and the upstream edge of said servo signal recording head and said outer edge of at least one of said guide blocks and a plane formed by the outer edge of said at least one of said guide blocks and an edge of a tape guide which is adjacent to said at least one of said guide block along a passing line of said magnetic tape is 0.5 to 2.0 degrees.

19. (previously presented): A magnetic head assembly according to Claim 1, wherein the magnetic tape comes into contact with only the outer edge of the guide block.

20. (previously presented): A magnetic head assembly according to Claim 1, wherein the magnetic tape slides on the sliding surface of the servo signal recording head.

21. (previously presented): A magnetic head assembly according to Claim 1, wherein the magnetic tape is not parallel to an uppermost surface of the guide block.

22. (previously presented): A magnetic head assembly according to Claim 1, wherein the recording head includes a planar surface as the sliding surface and wherein the guide block is

displaced from the planar surface, the guide block having a guide block planar surface substantially parallel to the planar sliding surface.

23. (canceled).

24. (previously presented): A magnetic head assembly according to Claim 1, wherein the guide block is comprised of an inner wall, which is closest to the servo signal recording head, and an outer wall, which is farthest away from the servo signal recording head, wherein the outer edge is formed on the outer wall.

25. (previously presented): A magnetic head assembly according to Claim 24, wherein the inner wall directly abuts the servo signal recording head.

26. (currently amended): A servo signal writer, comprising:

a magnetic tape;

a magnetic tape driving assembly,

a controller which controls the tape driving assembly, and

a magnetic head assembly to record servo signals, that serves for positioning of data recording magnetic heads and data reproducing magnetic heads, on the magnetic tape, the magnetic head assembly comprising:

a servo signal recording head wherein a sliding surface of said servo signal recording head has a magnetic gap embedded thereon in order to record said servo signals onto the magnetic tape, and

a guide block which is set adjacent to a position of up-stream of a line of said magnetic tape passing said servo signal recording head and is slightly set back from said sliding surface of said servo signal recording head so that said magnetic tape slides on an edge of said servo signal recording head and on an outer edge of said guide block, wherein the magnetic tape comes into contact with only the outer edge of the guide block;

wherein the recording head includes a planar surface as the sliding surface and wherein an uppermost surface of the guide block is substantially parallel to the planar sliding surface.

27. (canceled).

28. (previously presented): The servo signal writer according to Claim 26, wherein the magnetic tape slides on the sliding surface of the servo signal recording head.

29. (previously presented): The servo signal writer according to Claim 26, wherein the magnetic tape is not parallel to the uppermost surface of the guide block.